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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,674	05/22/2006	Thomas Froehlich	BUSS3001/FJD	7672
23364 7590 02/03/2009 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER KHUU, HEN DIEU THI				
ART UNIT 2863		PAPER NUMBER		
MAIL DATE 02/03/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/535,674

Applicant(s)

FROEHLICH ET AL.

Examiner

CINDY H.D.T. KHUU

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-17 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-26 is/are allowed.
- 6) ☒ Claim(s) 12-17 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Reopening of Prosecution after Appeal Brief

In view of the Appeal Brief filed on 01/13/2009, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

**/Drew A. Dunn/
Supervisory Patent Examiner, Art Unit 2863**

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-17 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Freud et al. (US 5,650,571).

With respect to claim 12, Freud discloses of a flow measuring device for determining and/or monitoring the volume, and/or mass, flow rate of a medium (12) flowing through a containment (13) in a streaming direction (fig. 1), comprising:

at least one ultrasonic transducer (16 or 18), which emits and/or receives ultrasonic measuring signals (column 7, lines 6-13); and

a control/evaluation unit (38), which determines the volume, and/or mass, flow rate of the medium in the containment on the basis of the ultrasonic measuring signals according to the travel-time-difference principle (column 4, lines 40-67; column 12, lines 31-37) [[or according to the Doppler principle]], wherein:

associated with said control/evaluation unit (38) is at least one component of high power uptake (16, 18, 28 or 36; fig. 1); and

said control/evaluation unit (38) is embodied such that said at least one component of high power uptake (16, 18, 20, 28 or 36; fig. 1) is operated intermittently in a measuring phase and in an idle phase (20; gated on and off), wherein said at least one component is activated in the measuring phase, while said at least one component has a reduced power uptake, or is turned off, in the idle phase (low duty factor on-off power management; column 7, lines 15-35).

With respect to claim 13, Freud discloses further a flow measuring device wherein: the flow measuring device is a clamp-on flow measuring device or a measuring device which can be placed within the containment (fig. 1).

With respect to claim 14, Freud discloses further a flow measuring device wherein: said at least one the component of high power uptake is one of: an amplifier (28), an analog/digital converter (36), a microprocessor (38) or a logic chip.

With respect to claim 15, Freud discloses further a flow measuring device further comprising: at least one component having a switching function, said at least one component having the switching function activates (on), or deactivates (off), said at least one component of high power uptake (on and off; column 7, lines 15-35).

With respect to claim 16, Freud discloses further a flow measuring device wherein: a mechanism for decreasing current consumption is integrated into said at least one component (20) of high power uptake (column 7, lines 15-35).

With respect to claim 17, Freud discloses further a flow measuring device wherein: said at least one component having a switching function comprises a semiconductor switch (17; column 7, lines 15-18).

With respect to claim 22, Freud discloses a flow measuring device further comprising: an energy storage element (20) associated with said control/evaluation unit (38), which is sized such that it can at least store the energy required in the measuring phase (column 7, lines 14-25).

Allowable Subject Matter

Claims 23-26 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claim 23 is the inclusion of the limitation "a flow measuring device wherein: the time span between two successive measuring, or idle, phases of said at least one component of high power uptake and/or the duration of a measuring phase (t_2) and/or the duration of an idle phase (t_1) of said at least one component of high power uptake is/are predetermined".

The primary reason for the allowance of claim 24 is the inclusion of the limitation "a flow measuring device further comprising: an input unit, via which the time span between two successive measuring, or idle, phases of said at least one component of high power uptake and/or the duration of a measuring phase (t_2) and/or the duration of an idle phase (t_1) of said at least one component of high power uptake is predeterminable".

The primary reason for the allowance of claim 25 is the inclusion of the limitation "a flow measuring device wherein: said control/evaluation unit determines the travel time of the measuring signals on the basis of predetermined system and/or process variables and specifies the time span between two successive measuring, or idle, phases of said at least one component of high power takeup and/or the duration of a measuring phase (t_2) and/or the duration of an idle phase (t_1) of said at least one component of high power takeup, as a function of the determined travel time".

The primary reason for the allowance of claim 26 is the inclusion of the limitation "a flow measuring device wherein: said control/evaluation unit determines the travel time of the measuring signals on the basis of predetermined system and/or process variables, and said control/evaluation unit predetermines the time span between two successive measuring, or idle, phases of said at least one component of high power takeup and/or the duration of a measuring phase (t_2) and/or the duration of an idle phase (t_1) of said at least one component of high power takeup, as a function of the determined travel time and as a function of the energy which is available".

The prior art of record, taken alone or in combination, fails to disclose or render obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy D. Khoo whose telephone number is (571) 272-8585. The examiner can normally be reached on M-F, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/chk/
1/22/2009

Drew A. Dunn
/Drew A. Dunn/
Supervisory Patent Examiner, Art Unit 2863